

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1           **Claim 1 (currently amended):** A method for producing a  
2       semi-conducting device comprising at least a first layer  
3       doped with a doping agent and a second layer ~~of another~~  
4       ~~type~~ deposited on said first doped layer in a single  
5       reaction chamber, wherein the deposition steps of said  
6       first and second layers are separated by an operation for  
7       avoiding the contamination of said second layer by the  
8       doping agent ~~of said another layer~~.

1           **Claim 2 (original):** The method of claim 1, wherein  
2       said operation comprises a dosing of the reaction chamber  
3       with a compound able to react with the doping agent.

1           **Claim 3 (original):** The method of any of claims 1 and  
2       2, wherein said operation comprises a dosing of the  
3       reaction chamber with a vapour or gas comprising water,  
4       methanol, isopropanol or another alcohol.

1           **Claim 4 (original):** The method of claims 1 and 2,  
2       wherein said operation comprises a dosing of the reaction  
3       chamber with a vapour or gas comprising ammonia, hydrazine

4        or volatile organic amine.

1            **Claim 5 (currently amended):** The method of ~~any of~~  
2        ~~claims~~ claim 3 ~~and 4~~, wherein said dosing is performed at  
3        around 0.05 to 100 mbar and between 100 and 350°C for less  
4        than 10 minutes.

1            **Claim 6 (currently amended):** The method of ~~claims~~  
2        claim 1 ~~to 6~~, wherein the doped layer is a p-doped layer.

1            **Claim 7 (currently amended):** The method of ~~claims~~  
2        claim 1 ~~to 6~~, wherein the doped layer is a n-doped layer.

1            **Claim 8 (original):** The method of claim 6, wherein  
2        said operation is followed by the deposition of a buffer  
3        layer on the p-layer.

1            **Claim 9 (currently amended):** The method of ~~any of~~  
2        ~~claims~~ claim 2 ~~to 8~~, wherein said dosing is followed by a  
3        pumping at high vacuum and between 100 and 350°C for less  
4        than 5 minutes.

**Claims 10-13 (canceled)**

1            **Claim 14 (new):** The method of claim 1, wherein said

2       doping agent on the surface of a substrate is transformed  
3       into stable chemical compounds.

1               **Claim 15 (new):** The method of claim 4, wherein said  
2       dosing is performed at around 0.05 to 100 mbar and between  
3       100 and 350°C for less than 10 minutes.